CTR Grant # 1361

Final Progress Report for Grant HL-27326. Period covered 4/1/81 to 9/30/81

This grant supported in part a highly successful Gordon Research Conference on Elastin held at Kimball Union Academy, Meriden, N.H. on August 10-14, 1981. It was attended by 102 scientists actively engaged in the field and there was good representation of foreign scientists and leaders in the field from industry, government and the academic sector. The physical and chemical structure of elastin was discussed including new primary sequence data and proposed β-helical secondary structures which may be unique to elastin. The mechanism of elastin crosslinking was examined and the possible involvement of the microfibrillar component in crosslinking was considered. Biosynthetic and structural studies on the microfibrillar component were also discussed. New and exciting data on the cloning of elastin cDNA and its use in studies on the regulation of elastin synthesis was presented. An extremely important report was that of the cloning of the gene for human α-1. Such clones may ultimately be important in future therapies for emphysema. The application of new immunologic techniques such as monoclonal antibodies and enzyme linked immunosorbent assays to problems in elastin synthesis and degradation were extensively explored. Since elastin destruction is a major and crucial component in the pathogenesis of chronic obstructive lung disease, considerable time was spent in presentations and discussions of elastolytic enzymes and their inhibitors, as well as on findings in human and experimental emphysema models. Finally, the involvement of elastin in vascular disease was described. A copy of the program is attached.

Joel Rosenbloom
Chairman, Elastin Gordon Conference

Source: https://www.industrydocuments.ucsf.edu/docs/ffkv0000